

THE ALDER FLYCATCHER IN WASHTENAW COUNTY, MICHIGAN: BREEDING DISTRIBUTION AND COWBIRD PARASITISM

BY ANDREW J. BERGER AND DAVID F. PARMELEE

THE Alder Flycatcher (*Empidonax traillii*) is, taxonomically, a much-discussed species about whose detailed breeding distribution little has been written. It has been shown (Berger and Hofslund, 1950; Berger, 1951b) that this species is a common breeding bird in the Ann Arbor region. In 1951, we decided to make a survey of the breeding Alder Flycatchers in Washtenaw County, Michigan. We wanted to determine whether the species breeds throughout the county and whether it is as abundant elsewhere as in Ann Arbor Township. Although we had done no previous field-work in 12 of the 20 townships, we thought, from past experience, that it would be a simple matter to locate the flycatchers by their song as we drove slowly along county roads. We found on July 1 and thereafter, however, that the males sang from dawn to about 8:30 a.m., were generally quiet throughout most of the day, and began to sing vociferously about 8:00 p.m. Singing stopped again about 9:00 p.m. (see McCabe, 1951, regarding morning and evening song in Wisconsin). During most of the day, therefore, it was necessary to stop and search for the birds in what we believed to be suitable habitat. With the exception of Sharon Township and one locality in Ann Arbor Township, we avoided rivers in our survey because we wished to emphasize the fact that in southern Michigan the Alder Flycatcher habitually nests in the vicinity of ponds and potholes and in a dry habitat, as well as along rivers and in extensive marshes. We were unable to detect any differences in the songs and call-notes given by birds living in the wet and the dry habitats.

We found the first nest on June 4, 1951, and five additional nests under construction on June 8, but the survey itself was not begun until June 22. It was completed on July 7. Time available for the study was limited: the longest period in the field on any one day was six hours, the shortest period, one hour. Parts of seven days (27 hours) were spent in the survey. We drove 340 miles. In most townships we searched only long enough to find one nest, although we noted the number of birds seen or heard. This report obviously is not a breeding census, but rather a survey to show that the Alder Flycatcher is generally distributed in Washtenaw County, and that it does nest in each of the 20 townships of that county.

As indicated above, the number of nests listed after the several townships in Table 1 is not necessarily an indication of the species' abundance. More nests were found in Ann Arbor Township partly because we knew it better

TABLE 1

BREEDING DISTRIBUTION OF THE ALDER FLYCATCHER IN WASHTENAW COUNTY IN 1951

Date	Township	Section	Nest-site	Nest Contents
June 22	Ann Arbor	27	1. Cornus 2. Salix 3. Cornus 4. Cornus 5. Salix 6. Salix 7. Cornus 8. Salix	4 eggs. 1 Cowbird egg and 3 host eggs. 1 Cowbird egg and 4 host eggs. 3 eggs. 1 egg. 1 egg. 4 eggs. Complete but empty.
June 24	Northfield	31	9. Cornus	3 eggs, 2 of which were broken.
June 24	Ypsilanti	19	10. Crataegus	4 eggs.
June 24	Pittsfield	12	11. Cornus	4 eggs.
June 24	Augusta	20	12. Cornus	4 eggs.
June 24	York	32	13. Alnus	1 egg.
June 24	Saline	28	14. Cornus	1 Cowbird egg.
June 24	Manchester	12	15. Sambucus	1 Cowbird egg and 4 host eggs.
July 1	Salem	5	16. Cornus 17. Crataegus	4 young about 5 days old. 4 eggs.
July 1	Northfield	1	18. Cornus	2 eggs and 2 recently hatched young.
July 1	Webster	6	19. Cephalanthus	3 eggs.
July 1	Superior	20	20. Cornus 21. Cornus 22. Crataegus 23. Crataegus	1 egg and 1 day-old dead young. 4 young about 3 days old. Nest under construction. 3 eggs.
July 3	Ann Arbor	31	24. Cornus 25. Crataegus 26. Crataegus 27. Crataegus	4 young about 1 week old. 3 young about 5 days old. 4 young about 2 days old. 1 recently hatched dead young (with most of viscera eaten) lying on ground beneath nest, and 1 day-old young in nest with bloody left scapular region.
		33	28. Cornus 29. Ligustrum 30. Lonicera	3 eggs nearly ready to hatch. 4 eggs. 1 Cowbird egg and 3 host eggs.
		36	31. Crataegus 32. Crataegus 33. Crataegus	4 eggs. 4 eggs. 2 eggs and 1 young 3-4 days old.
July 4	Ann Arbor	12	34. Crataegus 35. Crataegus	2 eggs. 3 young about 1 week old.
July 4	Dexter	32	36. Cephalanthus	1 Cowbird about 1 week old and 1 host egg.
July 4	Lyndon	28	37. Cephalanthus	1 Cowbird egg and 3 host eggs.
July 4	Scio	17	38. Cornus	3 eggs.
		25	39. Sambucus	Complete but empty.
July 4	Sylvan	9	40. Cephalanthus	Adult brooding 4 recently hatched young.
		10	41. Nest not found	Adult attending 1 stub-tailed fledgling out of nest 1 or 2 days.
		15	42. Pyrus Malus	Complete but empty new nest.
July 4	Lima	14	43. Alnus	1 egg.
July 5	Lodi	18	44. Cornus	4 eggs.
July 7	Freedom	21	45. Cornus	3 young nearly ready for fledging.
July 7	Sharon	28	46. Cornus	1 Cowbird and 1 flycatcher, both about 1 week old.
July 7	Bridgewater	20	47. Sambucus	4 young about 10 days old.

than the others, and partly because the colonies there were larger. There is, however, considerably more suitable habitat for the Alder Flycatcher in the northern two tiers of townships than in the southern two. In the latter, a high percentage of the land is cultivated or is in woodlots; lakes, ponds, and marshes are relatively uncommon. For example, we found only three pairs of Alder Flycatchers (one pair each in Sections 1, 28, and 29) in Saline Township while driving 34 miles over county roads during a three-hour period. This is about the same length of time that was required to find nests in each



FIG. 1. Typical *Crataegus* habitat of the Alder Flycatcher in Washtenaw County, Michigan, Section 36, Ann Arbor Township. From a Kodachrome transparency taken July 20, 1951, by A. J. Berger.

of five townships in the northwestern corner of Washtenaw County (see data for July 4). In the southern townships, the birds, for the most part, occur as isolated pairs, not in colonies. In the more northern townships, on the other hand, there are many lakes, ponds, and marshes. Here the species is much more common during the breeding season. Furthermore, colonies of five or more pairs may be found regularly. We feel certain that one could find 40 or 50 nests in one day in almost any of the northern two tiers of townships, whereas in some of the southern townships, one would do well to find three or four nests in a full day of searching. In Ohio, Campbell (1940: 195) also noted that: "Unlike other local flycatchers, Alders often nest in small colonies of three to six pairs."

Although meager, information is available which sheds some light on geographical differences in habitat and nest-site preference. We suspect that these differences may be more apparent than real, since the Alder Flycatcher has received little intensive study in the field. Barrows (1912:404) noted that in Monroe County, Michigan, Mr. Trombley "found at least twenty nests in one restricted locality, all in alders, willows or similar low growth in wet ground." Hyde (1939:155) stated that in New York: "The alder flycatcher is well named, for it is seldom seen or heard outside an alder swamp, and few large alder swamps are without at least one pair of the birds." In Ohio, Trautman (1940:295) said that this species "nested almost everywhere about the lake, swamps, lowlands, and creeks where swampy and brushy conditions prevailed. For nesting sites it seemingly preferred brush, 3 to 18 feet high, composed of such trees as small willows, alders, buttonbush, and dogwood." Farley (1901:350) said of Alder Flycatchers in Massachusetts: "So far as I have observed, it nests invariably in a bush, selecting most often a wild rose, or clump of rose shoots or sprays—usually *Rosa carolina* L." He added that once he found a nest in *Spiraea salicifolia*. Mousley (1931:551) stated: "The favourite nesting site around Hatley [Quebec] is in the forks of a spiraea bush, only once have I found a nest in an alder tree, twice in nut bushes, and once in a wild gooseberry bush." Campbell (1936) described a population of Alder Flycatchers in Ohio which nested in cockspur hawthorn. In one wet habitat near Ann Arbor, Michigan, Berger and Hofslund (1950) found the following three plants most often used for nest-sites: nine-bark (*Physocarpus*), 14 nests; dogwood (*Cornus*), 8 nests; willow (*Salix*), 7 nests. In the present study we found nests in the following: *Cornus*, 18 nests; *Crataegus*, 12; *Salix*, 4; *Cephalanthus*, 4; *Sambucus*, 3; *Alnus*, 2; and one each in *Pyrus*, *Ligustrum*, and *Lonicera*.

In Washtenaw County, the Alder Flycatcher frequently nests in *Crataegus* bushes on dry hillsides, usually in the vicinity of small ponds. By the first of July many of these ponds (sometimes not more than 50 feet in diameter) have become dry. Berger has found the Alder Flycatcher nesting in dry habitat in Section 20, Superior Township, and in Sections 12, 27, 31, 33, and 36, Ann Arbor Township. At the University Botanical Gardens (Section 33, Ann Arbor Township), the birds nest most frequently in privet (*Ligustrum vulgare*) and Tartarian honeysuckle (*Lonicera tatarica*), but a nest with one Cowbird (*Molothrus ater*) egg and two host eggs found there on July 20, 1951, was built in a wayfaring tree (*Viburnum lantana*). We assume that one familiar with the southern two tiers of townships would find local breeding populations of Alder Flycatchers in similar dry habitats.

In writing of the Alder Flycatcher, most authors emphasize its propensity for nesting in dense thickets. This is true, in part, in southern Michigan, al-

though the species commonly builds its nests in an isolated bush. When nests are built in dense thickets, however, they usually are placed in the outer edge of the thicket, often in an exposed situation. One frequently can find the nest simply by walking around the margin of a thicket. We also found several nests in road-side shrubbery; one such nest was built only seven feet from the edge of a road. Previous reference (Berger and Hofslund, 1950; see also Fargo, 1928) has been made to the two general types of nests, both of which may be found in the same colony, which are built in southern Michigan: those built in an upright crotch, and those fastened to a horizontal branch. The latter usually are less concealed, whereas the former sometimes are placed within the depths of thickets. In general, however, the bird is an edge-nester.

We found the incidence of Cowbird parasitism (20.8% of 48 nests) considerably higher than in recent southern Michigan observations (8.1% of 37 nests, Berger, 1951a). Gibbs (1890:8) stated that Traill's Flycatcher (=Alder) served as a host in southern Michigan. Bendire (1895:311) noted that: "The Cowbird occasionally deposits an egg in the nest" of the Alder Flycatcher. From data available at the time, Friedmann (1929:209) considered this species a "rather rare molothrine victim," but added further (p. 210): "Cook, in his unreliable list, mentions it as a molothrine host in Michigan." In Ohio, Hicks (1934:386) reported 21% of 108 nests parasitized, and Trautman (1940:296) found 9 out of 16 nests parasitized at Buckeye Lake. On August 19, 1951, Berger found a nest containing three Alder Flycatchers within a day or two of fledging. This nest was a two-storied structure and contained one Cowbird egg and one host egg in the lower story. The only previous report of a two-storied nest of the Alder Flycatcher seems to be that of Anderson (1907:299) who said: "W. A. Bryan has also found a Traill Flycatcher's nest with a Cowbird's egg imbedded."

Much interesting and significant information could be obtained by co-operative studies of a single species in different parts of its breeding range. See, for example, the discussion by Aldrich (1951) regarding difficulties involved in the determination of subspecies of the Alder Flycatcher because data on breeding status were lacking. Of necessity, Aldrich selected arbitrary dates (June 21 to July 26) for deciding which specimens he examined were migrants and which were breeding birds. Similarly, Phillips (1948:507) said that "only from June 25 to July 20 may the birds be presumed to be on their breeding grounds." Four years' observations in the Ann Arbor region have shown us that the breeding season here extends at least from June 4 to August 19. It remains to be determined whether or not late spring or early fall migrants also appear on the breeding grounds during this period.

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